UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

08/22/2008

Joseph S Tripoli Thomson Multimedia Licensing Inc P O Box 5312 Princeton, NJ 08543-5312 EXAMINER

MATTIS, JASON E

ART UNIT PAPER NUMBER

8403

2616

DATE MAILED: 08/22/2008

APPLICATION NO. FILING	DATE FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
------------------------	---------------------------	---------------------	------------------

10/518,555 12/22/2004 Maxim Borisovich Belotserkovsky PU020325

TITLE OF INVENTION: METHOD AND APPARATUS FOR ANTENNA SELECTION USING CHANNEL RESPONSE INFORMATION IN A MULTI-CARRIER SYSTEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/24/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further co indicated unless corrected maintenance fee notificatio	rrespondence includir below or directed oth	g the Patent, advance of terwise in Block 1, by (a	rders and notification of a) specifying a new cor	f maintenance fees v respondence address	will be n ; and/or	nailed to the current (b) indicating a sep	correspondence address a arate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				ee(s) Transmittal Th	us certifi	cate cannot be used t	or domestic mailings of the for any other accompanying ent or formal drawing, mus
7:	590 08/22	/2008				of Mailing or Trans	
Joseph S Tripoli Thomson Multime P O Box 5312			I S a tr	hereby certify that the	nis Fee(s)) Transmittal is bein	g deposited with the United st class mail in an envelope above, or being facsimiled late indicated below.
Princeton, NJ 0854	43-5312		Γ				(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	OR	ATTOR	RNEY DOCKET NO.	CONFIRMATION NO.
10/518,555	12/22/2004	Ma	xim Borisovich Belotser	kovsky		PU020325	8403
TITLE OF INVENTION: MULTI-CARRIER SYSTE		PPARATUS FOR ANT	ENNA SELECTION	USING CHANNEL	RESPO	NSE INFORMATIO	ON IN A
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DU	E PREV. PAID ISSU	JE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	11/24/2008
EXAMIN	ER	ART UNIT	CLASS-SUBCLASS				
MATTIS, JA		2616	370-329000				
1. Change of correspondence CFR 1.363).		`	2. For printing on th (1) the names of up			-vs 1	
Change of correspon- Address form PTO/SB/1	dence address (or Cha 22) attached.	nge of Correspondence	or agents OR, altern	atively,			
"Fee Address" indica	☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.			
3. ASSIGNEE NAME ANI	O RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or	type)			
PLEASE NOTE: Unless recordation as set forth it	s an assignee is ident n 37 CFR 3.11. Comp	fied below, no assignee lletion of this form is NO	data will appear on the T a substitute for filing	patent. If an assign an assignment.	nee is ide	entified below, the d	locument has been filed fo
(A) NAME OF ASSIGN	NEE		(B) RESIDENCE: (CI	ΓY and STATE OR (COUNT	RY)	
Please check the appropriate			•			1 0	oup entity Governmen
4a. The following fee(s) are Issue Fee	e submitted:	41	 Payment of Fee(s): (P A check is enclosed 		ny previ	ously paid issue fee	shown above)
Publication Fee (No	small entity discount p	permitted)	Payment by credit		8 is attac	ched.	
Advance Order - # o	of Copies		The Director is here overpayment, to De	eby authorized to cha posit Account Numb	rge the re	equired fee(s), any de	eficiency, or credit any an extra copy of this form).
5. Change in Entity Status a. Applicant claims S	*		☐ b. Applicant is no l	onger claiming SMA	LL ENT	ITY status. See 37 C	FR 1.27(g)(2).
NOTE: The Issue Fee and I interest as shown by the rec	Publication Fee (if requeots of the United Sta	ıired) will not be accepte tes Patent and Trademark	d from anyone other that Office.	n the applicant; a reg	istered at	ttorney or agent; or t	he assignee or other party in
Authorized Signature				Date			
Typed or printed name							
This collection of informati an application. Confidential submitting the completed a this form and/or suggestion Box 1450, Alexandria, Virg	on is required by 37 C	FR 1 311 The information	on is required to obtain	or retain a benefit by	the publi	c which is to file (an	d by the USPTO to process
this form and/or suggestion Box 1450, Alexandria, Virg Alexandria, Virginia 22313 Under the Paperwork Reduc	-1450.						
ander the raperwork Kedus	CHOII ACT OF 1995, IIO	Actions are required to re	spond to a concention of	imormation uniess it	шорлаув	a vana Owid Condo.	i namoti.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/518,555	12/22/2004	Maxim Borisovich Belotserkovsky	PU020325	8403	
75	90 08/22/2008		EXAM	INER	
Joseph S Tripoli			MATTIS, JASON E		
Thomson Multimedia Licensing Inc		ART UNIT	PAPER NUMBER		
P O Box 5312 Princeton, NJ 08543-5312			2616 DATE MAILED: 08/22/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 775 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 775 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No. Applicant(s)				
	10/518,555	BELOTSERKOVSKY ET AL.			
Notice of Allowability	Examiner	Art Unit			
	JASON E. MATTIS	2616			
The MAILING DATE of this communication appeal all claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT R	(OR REMAINS) CLOSED i or other appropriate comm IGHTS. This application is 3 and MPEP 1308.	n this application. If not included unication will be mailed in due course. THIS subject to withdrawal from issue at the initia			
1. This communication is responsive to the Request for Cont.	inued Examination filed 6/6/	<u>′08</u> .			
2. ☑ The allowed claim(s) is/are <u>1-20</u> .					
 3. Acknowledgment is made of a claim for foreign priority until a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do 	e been received. e been received in Applicati	on No	.		
International Bureau (PCT Rule 17.2(a)).					
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		e a reply complying with the requirements			
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) \square including changes required by the Notice of Draftspers	son's Patent Drawing Revie	w (PTO-948) attached			
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	•				
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t					
 DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT 					
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 6/08 4. ☐ Examiner's Comment Regarding Requirement for Deposit	6. ☐ Interview S Paper No. 7. ☐ Examiner's	formal Patent Application ummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance			
of Biological Material	9.				
	/FIRMIN BAC	KER/			
	Supervisory Pa	tent Examiner, Art Unit 2616			

Application/Control Number: 10/518,555 Page 2

Art Unit: 2616

DETAILED ACTION

1. This Office Action is in response to the Request for Continued Examination filed 6/6/08. Claims 1-20 are currently pending in the application.

Allowable Subject Matter

- 2. Claims 1-20 are allowed.
- 3. The following is a statement of reasons for the indication of allowable subject matter:

Independent claims 1, 8, and 14 are allowable since none of the prior art of record discloses or renders obvious the claim limitation stating, "determining an intermediate channel quality metric (CQM) for each group of N bits of the channel response data by determining which group of N bits corresponds to the weakest corresponding channel response estimate, where N is an integer; and selecting the intermediate channel quality metric corresponding to the weakest channel response estimate as the overall channel quality metric for the channel". Claims 2-7, 9-13, and 15-20 are allowable since they each depend on and further limit one of the allowable independent claims.

Application/Control Number: 10/518,555 Page 3

Art Unit: 2616

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON E. MATTIS whose telephone number is (571)272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEM

/FIRMIN BACKER/ Supervisory Patent Examiner, Art Unit 2616